

## CLAIMS

What is claimed is:

1. An integrated circuit comprising:
  - a field programmable gate array core having logic clusters, static random access memory modules, and routing resources;
  - a field programmable gate array virtual component interface translator having inputs and outputs, said inputs connected to said field programmable gate array core;
  - a microcontroller;
  - a microcontroller virtual component interface translator having input and outputs, said inputs connected to said microcontroller;
  - a system bus connected to said outputs of said field programmable gate array virtual component interface translator and to said outputs of said microcontroller virtual component interface translator; and
  - direct connections between said microcontroller and said routing resources of said field programmable gate array core.